DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES Office of Structural Materials

Quality Assurance and Source Inspection

Bay Area Branch 690 Walnut Ave.St. 150 Vallejo, CA 94592-1133 (707) 649-5453 (707) 649-5493



Contract #: 04-0120F4

Cty: SF/ALA Rte: 80 PM: 13.2/13.9

File #: 69.28

WELDING INSPECTION REPORT

Resident Engineer: Pursell, Gary **Report No:** WIR-001773 Address: 333 Burma Road **Date Inspected:** 16-Mar-2008

City: Oakland, CA 94607

OSM Arrival Time: 1800 **Project Name:** SAS Superstructure **OSM Departure Time:** 730 **Prime Contractor:** American Bridge/Fluor Enterprises, a JV

Contractor: Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **Location:** Changxing Island

CWI Name: Chen Xi **CWI Present:** Yes No **Inspected CWI report:** Yes N/A **Rod Oven in Use:** Yes No No N/A N/A **Electrode to specification:** Yes No Weld Procedures Followed: Yes No N/A N/A **Qualified Welders:** Yes No **Verified Joint Fit-up:** Yes No N/A N/A Yes No N/A **Approved Drawings:** Yes No **Approved WPS:** Yes No N/A **Delayed / Cancelled:**

34-0006 **Bridge No: Component:** OBG

Summary of Items Observed:

Caltrans Quality Assurance (QA) Inspector, Larry Viars was present to perform Visual Testing (VT) of the Orthotropic Box Girder (OBG) components, for the San Francisco Oakland Bay Self Anchored Suspension Bridge, at Zhenhua Port Machinery Company (ZPMC) facility on Changxing Island.

The Caltrans QA Inspector performed visual inspection of OBG 16.365 meter deck panel DP042-001 (welds 004, 005 and 006) and 14.960 meter DP003-001 (welds 007, 008 and 009) U-rib Partial Joint Penetration (PJP) welds. Visual testing of welding was performed in accordance with contract documents. The following discontinuities were found during inspection on the Submerged Arc Welding (SAW) cover pass, incomplete fusion, overlap, undercut, underfill and oversize welds. Welding discontinuities were marked on deck panel with a permanent marker, length and Y location recorded. Visual Inspection results were distributed to the appropriate personnel for review. A summary of discontinuities on inspected U- rib PJP welds are listed below.

DP003-001

DP003-001-007, Incomplete Fusion 1 area, Overlap 2 areas, and Underfill 2 areas.

DP003-001-008, Oversize 6 areas, and Underfill 1 area.

DP003-001-009, Overlap 1 area, Underfill 6 areas, and Oversize 1 area.

DP042-001

DP042-001-004, Overlap 11 areas, Underfill 17 areas, and Incomplete Fusion 1 area.



WELDING INSPECTION REPORT

(Continued Page 2 of 2)

DP042-001-005, Overlap 4 areas, Underfill 14 areas, Incomplete Fusion 1 area, and Oversize 2 areas. DP042-001-006, Overlap 5 areas, and Underfill 11 areas.

Summary of Conversations:

No relevant conversations occurred this date.

Comments

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Mazen Wahbeh, (818) 292-0659, who represents the Office of Structural Materials for your project.

Inspected By:	Viars,Larry	Quality Assurance Inspector
Reviewed By:	Cuellar,Robert	QA Reviewer